AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A method comprising:

identifying a receive capability associated with one or more priority levels of Ethernet traffic for a network device;

determining a flow control priority level based on one or more of a class-of-service, a type-of-service, a quality-of-service, and a time sensitivity of the Ethernet traffic, wherein the flow control priority level denotes an identified priority level above and/or below which the network device is able to receive Ethernet traffic; and

generating a control message including the flow control priority level, the flow control priority level to cause throttling of Ethernet traffic from network devices receiving the control message.

2. (Currently Amended) ~~A~~ The method of claim 1, further comprising:

transmitting the generated control message to a communicatively coupled network device, whereupon receipt of the generated control message the communicatively coupled network device acts in accordance with the received control message to suspend a subset of Ethernet traffic.

3. (Currently Amended) ~~A~~ The method of claim 1, wherein the identifying further comprises determining available buffer capacity for each of a plurality of buffers associated with a commensurate plurality of Ethernet priority levels.

4. (Currently Amended) ~~A~~ The method of claim 3, wherein the available buffer capacity associated with a particular Ethernet priority level denotes the ability of the buffer to receive additional Ethernet traffic of that priority level.

5. (Currently Amended) ~~A~~ The method of claim 3, wherein the buffer for each priority level is comprised of one or more memory devices.

6. (Currently Amended) ~~A~~ The method of claim 3, wherein the buffers associated with each of the priority levels are virtual buffers implemented within a common physical buffer.

7. (Currently Amended) ~~A~~ The method of claim 3, wherein the generated control message includes an indication of the priority level above which a receive buffer has available capacity to receive Ethernet traffic of an associated priority level.

8. (Currently Amended) ~~A~~ The method of claim 7, wherein a receiving network device initiates a pause in transmission of Ethernet traffic having a priority level below that indicated in the received control message.

9. (Currently Amended) ~~A~~ The method of claim 1, wherein the generating of the control message further comprises generating an Ethernet control packet including a priority field, wherein the priority field denotes the flow control priority level.

10. (Currently Amended) ~~A~~ The method of claim 9, wherein the priority field is included in a header portion of the Ethernet control packet.

11. (Currently Amended) ~~A~~ The method of claim 1, further comprising:

receiving Ethernet traffic;

identifying a priority level associated with each packet of received Ethernet traffic; and

forwarding each received packet to a receive buffer based, at least in part, on the identified priority level associated with the Ethernet packet.

12. (Currently Amended) ~~A~~ The method of claim 11, further comprising monitoring the receive capability of buffers associated with each of the priority levels of Ethernet traffic.

13. (Currently Amended) ~~A~~ The method of claim 1, wherein throttling transmission of a subset of Ethernet traffic comprises temporarily suspending transmission of the subsets of Ethernet traffic for a set period of time and/or until another control message is received denoting that transmission of the subset of Ethernet traffic may resume.

14. (Previously Presented) A method comprising:

receiving a control message denoting a flow control priority level from a network device which denotes an identified priority level above and/or below which the network device is able to receive Ethernet traffic, wherein the

flow control priority level is based on one or more of a class-of-service, a type-of-service, a quality-of-service, and a time sensitivity of the Ethernet traffic, wherein the flow control priority level; and

throttling transmission to the network device of a subset of Ethernet traffic having a priority level above or below that denoted in the received control message.

15. (Currently Amended) ~~A~~ The method of claim 14, wherein the flow control priority level denotes a priority level associated with a subset of Ethernet traffic above which the issuing network device has a receive capability.

16. (Currently Amended) ~~A~~ The method of claim 14, wherein the control message is an Ethernet control message.

17. (Currently Amended) ~~A~~ The method of claim 16, further comprising analyzing a header pf the received Ethernet control message to identify a flow control priority level.

18. (Currently Amended) ~~A~~ The method of claim 14, wherein throttling transmission comprises suspending transmission of a subset of Ethernet traffic having a priority level below the flow control priority level denoted in the received control message until a subsequent control message is received denoting an ability of an issuing network device to receive the subset of Ethernet traffic.

19. (Currently Amended) ~~A~~ The method of claim 14, further comprising:

receiving content from a host network device for transmission to another network device communicatively coupled through an Ethernet network; and

assigning a priority level to the received content based, at least in part, on a source of such content.

20. (Currently Amended) ~~A~~ The method of claim 14, further comprising:

receiving content from one or more source applications executing on a host network device, the content tagged with a priority level associated with its source application; and

selectively transmitting received content to another network device communicatively coupled through an Ethernet network based, at least in part on the priority level of the content.

21. (Currently Amended) A ~~network interface~~ system comprising:

a plurality of receive buffers, each associated with a particular priority level of Ethernet traffic; and

control logic, coupled to the receive buffers to

determine a flow control priority level based on one or more of a class-of-service, a type-of-service, a quality-of-service, and a time sensitivity of the Ethernet traffic, wherein the flow control priority level denotes an identified priority level above and/or below which the network device is able to receive Ethernet traffic, and

identify a receive capability of each of the receive buffers and selectively generate control messages including the flow control priority level to cause throttling of Ethernet traffic from network devices receiving the control messages.

22. (Currently Amended) ~~A network interface~~ The system of claim 21, further comprising:

a transmit buffer, responsive to a host network device and the control logic, to receive content from one or more applications executing on the host network device for transmission to other network devices through an Ethernet network, the received content including an indication of priority level.

23. (Currently Amended) ~~A network interface~~ The system of claim 22, wherein the indication of priority level in the received content is determined by its source application.

24. (Currently Amended) ~~A network interface~~ The system of claim 22, wherein the control logic receives control messages from other network interfaces wherein at least a subset of the control messages include a flow control priority level denoting an inability to receive Ethernet traffic having a priority level below that of the denoted flow control priority level.

25. (Currently Amended) ~~A network interface~~ The system of claim 24, wherein the control logic suspends transmission of Ethernet traffic having a priority level below that of the denoted flow control priority level from the transmit buffer to the network device having issued the control message.

26. (Currently Amended) ~~A network interface~~ The system of claim 21, wherein the control logic is a media access controller (MAC).

27. (Currently Amended) ~~A network interface~~ The system of claim 26, the MAC including enhanced flow control capability to implement flow control on a mere subset of Ethernet traffic.

28-30. (Cancelled)

31. (Currently Amended) A computer program product comprising a machine-readable medium having ~~sets of~~ instructions~~,~~ which when executed ~~by a machine,~~ causes ~~the~~ a machine to:

identify a receive capability associated with one or more priority levels of Ethernet traffic for a network device;

determine a flow control priority level based on one or more of a class-of-service, a type-of-service, a quality-of-service, and a time sensitivity of the Ethernet traffic, wherein the flow control priority level denotes an identified priority level above and/or below which the network device is able to receive Ethernet traffic; and

generate a control message including a flow control priority level, the flow control priority level denoting the identified priority level above or below which the network device has the ability to receive Ethernet traffic.

32. (Currently Amended) The ~~machine-readable medium~~ computer program product of claim 31, wherein the ~~sets of~~ instructions~~,~~ when further executed ~~by the machine, further~~ cause the machine to transmit the generated control message to a communicatively coupled network device, whereupon receipt of the generated control message the communicatively coupled network device acts in accordance with the received control message to suspend a subset of Ethernet traffic.

33. (Currently Amended) The ~~machine-readable medium~~ computer program product of claim 31, wherein the ~~sets of~~ instructions~~,~~ when further executed ~~by the machine, further~~ cause the machine to determining available buffer capacity for each of a plurality of buffers associated with a commensurate plurality of Ethernet priority levels